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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/408,447	09/29/1999	TSUKASA SAKO	862.3050	4061

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FITZPATRICK CELLA HARPER & SCINTO  
30 ROCKEFELLER PLAZA  
NEW YORK, NY 10112

EXAMINER

KIM, CHONG R

ART UNIT	PAPER NUMBER
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2623

DATE MAILED: 10/08/2002

8

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application

09/408,447

Applicant(s)

SAKO ET AL.

Examiner

Charles Kim

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-67 is/are pending in the application.
- 4a) Of the above claim(s) 39-67 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Response to Restriction*

Applicant's election with traverse of group I, of claims 1-38 in Paper No. 7 is acknowledged. The traversal is on the ground(s) that the two groups are closely related in the field of image processing.

This is not found persuasive because even though they are closely related, each grouping is distinct and separately usable. Group I can be used to determine an output mode, and group II can be used to determine a layout.

Also, each group has a non-common limitation, for example group I has the limitation "determination means for determining an output method of the observation area on the basis of the size of the output medium", group II has the limitation "change means for changing the layout state of the output image in the output area in accordance with an instruction for changing the layout state displayed by said display means".

The requirement is still deemed proper and is therefore made FINAL.

This application contains claims 39-67 are drawn to an invention nonelected with traverse in Paper No. 7. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

***Specification***

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 12, 19, 27, and 34 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The applicant's specification does not sufficiently describe the limitation "to-be-photographed portion" in line 3 of claim 12. For examination purposes, the "to-be-photographed portion" is interpreted to mean the basic observation area for the doctor such as the area of the lung as disclosed on page 19, lines 15-22 of the applicant's specification.

Claims 19, 27, and 34 are also rejected for the reasons stated above.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

1. Claims 1-4, 6-9, 12, 16, 19, 23-24, 27, 31, 34 and 38 are rejected under 35 U.S.C. 102(e) as being anticipated by Endo (U.S. Patent No. 6,335,796).

Referring to claim 1, Endo discloses an image processing apparatus for processing image information obtained by exposing radiation on an object comprising:

- a. generation means for generating observation area information indicating an observation area of an object (col. 7, lines 31-33),
- b. input means for inputting a size of an output medium (col. 8, lines 16-20 and figure 11)
- c. determination means for determining an output method of the observation area on the basis of the size of the output medium (col. 9, lines 31-33 and figure 11)

Referring to claim 2, Endo further discloses that the radiation is X-ray (col. 4, line 24).

Referring to claim 3, Endo further discloses that the observation area is an area where the radiation is exposed (col. 7, lines 32-33).

Referring to claim 4, Endo further discloses an output mode input means (44) for inputting an output mode representing an output format of the observation area (col. 8, lines 31-43)

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Referring to claim 6, Endo further discloses that the output mode includes a mode in which the observation area is reduced and formed on a single output (col. 11, lines 3-10 and lines 25-31. Note that the portion being "clipped" in line 9 is interpreted to mean that the observation area is reduced.)

Claim 7 recites a method which corresponds to the apparatus of claim 1. Arguments analogous to those presented above with respect to claim 1 are applicable to claim 7. The apparatus disclosed by Endo inherently teaches this method.

Claim 8 is drawn to a computer readable storage medium on which a code for controlling a computer to process image information is stored, which corresponds to claim 1. Arguments analogous to those presented above with respect to claim 1 are applicable to claim 8. It is noted that Endo discloses a CPU and a storage memory for performing various types of processing (col. 4, lines 47-50).

Referring to claim 9 as best understood, see the rejection of at least claim 4 above. Endo further discloses an input means for inputting a size of an effective image area of the output medium (col. 7, lines 51-54. It is noted that the "effective image area of the output medium" in the claim language is interpreted as being analogous to the maximum size of the available film, in line 54).

Endo further discloses a determination means for determining an output method of the observation area on the basis of the observation area and contents input by the output mode input means and the output size input means (col. 7, lines 31-35, and col. 8, lines 16-43).

Referring to claim 12 as best understood, Endo further discloses that the observation area is set on the basis of a to-be-photographed portion in the image (col. 11, lines 3-8. Note that the

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“area of concern” is interpreted as being analogous to the to-be-photographed portion of the image).

Claim 16 recites a method which corresponds to the system of claim 9. Arguments analogous to those presented above with respect to claim 9 are applicable to claim 16. The system disclosed by Endo inherently teaches this method.

Claim 19 recites a method which corresponds to the system of claim 12. Arguments analogous to those presented above with respect to claim 12 are applicable to claim 19. The system disclosed by Endo inherently teaches this method.

Claim 23 is drawn to a computer readable storage medium on which a code for controlling a computer to process image information is stored, which corresponds to claim 9.

Arguments analogous to those presented above with respect to claim 9 are applicable to claim 23.

Referring to claim 24, see the rejection of at least claim 9 above. Endo further discloses a photographing means for photographing an image (col. 4, lines 23-27. It is noted that the image pick-up system is interpreted to mean a photographing means).

Referring to claim 27, see the rejection of at least claim 12 above.

Claim 31 recites a method which corresponds to the system of claim 24. Arguments analogous to those presented above with respect to claim 24 are applicable to claim 31. The system disclosed by Endo inherently teaches this method.

Referring to claim 34, see the rejection of at least claim 19 above.

Claim 38 is drawn to a computer readable storage medium on which a code for controlling a photographing system to process image information is stored, which corresponds to

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claim 24. Arguments analogous to those presented above with respect to claim 24 are applicable to claim 38.

*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 13, 20, 28, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Endo (U.S. Patent No. 6,335,796), in further view of Mochimaru (U.S. Patent No. 5,432,532).

Referring to claim 13, Endo fails to teach that the determination means determines a type of output medium to be used to output the observation area on the basis of an aspect ratio of the observation area.

Mochimaru discloses that the aspect ratio of the image signal (observation area) can be used to determine the type of output medium to be used to output the observation area (col. 12, lines 3-16).

Therefore, since Endo and Mochimaru are both concerned with outputting an image on different types of output mediums, it would have been obvious to modify the determination means of Endo, so that it determines a type of output medium on the basis of an aspect ratio of the observation area as taught by Mochimaru, in order to obtain an image print out having a correct vertical to lateral aspect ratio (Mochimaru, col. 12, lines 15-16).



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Claim 20 recites a method which corresponds to the system of claim 13. Arguments analogous to those presented above with respect to claim 13 are applicable to claim 20. The system disclosed by Endo and Mochimaru inherently teaches this method.

Referring to claim 28, see the rejection of at least claim 13 above.

Referring to claim 35, see the rejection of at least claim 20 above.

3. Claims 5, 14, 15, 21, 22, 29, 30, 36, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Endo (U.S. Patent No. 6,335,796), in further view of Tabata (U.S. Patent No. 5,774,232).

Referring to claim 5, Endo fails to explicitly state that the output mode includes a mode in which the observation area is divided into a plurality of areas and the plurality of areas are formed on a plurality of output media.

However, Tabata discloses an output mode that divides an image (observation area) into a plurality of areas and forms the plurality of areas on a plurality of paper (output media) (col. 16, line 66-col. 17, line 9 and figure 7).

Therefore, since Endo and Tabata are both concerned with outputting an image on different types of output mediums, it would have been obvious to modify the output mode of Endo, to include a mode in which the observation area is divided into a plurality of areas and formed on a plurality of output media as taught by Tabata, in order to obtain an output of the complete observation area, in situations where the observation area is larger than the size of the output media available.

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Referring to claim 14, Endo discloses that the output mode input means has at least a life-size output mode in which the observation area is output in an actual size (col. 10, lines 63-65), a reduction output mode in which the observation area is reduced an output (col. 11, lines 8-10), and an image extraction output mode in which a predetermined area is extracted from the observation area and output (col. 11, lines 2-8. Note that the "area of concern" in line 7 extracts a predetermined area such as the lung area to be output.).

Endo fails to teach a multiple output mode. However, Tabata discloses a multiple output mode in which the observation area is divided into a plurality of division areas and output to a plurality of output media, as disclosed above.

Therefore it would have been obvious to include the multiple output mode of Tabata, in the output mode means of Endo, in order to obtain an output of the complete observation area, in situations where the observation area is larger than the size of the output media available.

Referring to claim 15, Endo fails to disclose a multiple output mode.

Tabata discloses a multiple output mode, as disclosed above. Tabata teaches that when the image (observation area) does not fall within the effective image area of the paper (output medium), the image is divided corresponding to the size of the effective image area including boundaries of the observation area and output to a plurality of paper (output media) (col. 16, line 66-col. 17, line 8).

Therefore it would have been obvious to include the multiple output mode of Tabata, in the output mode means of Endo, in order to obtain an output of the complete observation area, in situations where the observation area is larger than the size of the output media available.

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Claims 21 and 22 recite a method which corresponds to the system of claims 14 and 15 respectively. Arguments analogous to those presented above with respect to claims 14 and 15 are applicable to claims 21 and 22. The system disclosed by Endo and Tabata inherently teaches these methods.

Referring to claim 29, see the rejection of at least claim 14 above.

Referring to claim 30, see the rejection of at least claim 15 above.

Referring to claim 36, see the rejection of at least claim 21 above.

Referring to claim 37, see the rejection of at least claim 22 above.

4. Claims 10-11, 17-18, 25-26, 32-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Endo (U.S. Patent No. 6,335,796), in further view of Murakami (U.S. Patent No. 6,356,651).

Referring to claim 10, Endo fails to explicitly state that the observation area is set on the basis of an X-ray irradiation stop of the X-ray generation apparatus. However, setting an observation area on the basis of an X-ray irradiation stop was exceedingly well known in the art.

For example, Murakami discloses that the irradiation field (observation area) is set on the basis of an X-ray irradiation stop of the X-ray generation apparatus (col. 12, lines 6-18).

Therefore, since Endo and Murakami are both concerned with X-ray imaging, it would have been obvious to set the observation area of Endo, on the basis of an X-ray irradiation stop as taught by Murakami, in order to provide the physician with the ability to define the observation field by adjusting the irradiation stop.

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Referring to claim 11, Murakami further discloses that the observation area is set on the basis of the irradiation area of the X-ray generated by said X-ray generation apparatus, which is extracted from the image (col. 14, lines 48-54).

Claims 17 and 18 recite a method which corresponds to the system of claims 10 and 11 respectively. Arguments analogous to those presented above with respect to claims 10 and 11 are applicable to claims 17 and 18. The system disclosed by Endo and Murakami inherently teaches these methods.

Referring to claim 25, see the rejection of at least claim 10 above.

Referring to claim 26, see the rejection of at least claim 11 above.

Referring to claim 32, see the rejection of at least claim 17 above.

Referring to claim 33, see the rejection of at least claim 18 above.

### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Neuhard U.S. Patent No. 6,335,795 discloses a method for customizing print attribute choices based on selected model media.
- b. McShane U.S. Patent No. 5,644,611 discloses a method for maximizing the number of radiological images on a display.
- c. Sakakihara U.S. Patent No. 5,042,060 discloses a method for changing photographic formats in X-ray equipment.

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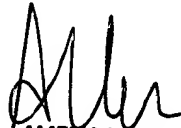
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Kim whose telephone number is 703-306-4038. The examiner can normally be reached on Monday thru Thursday 8:30am to 6:00pm and alternating Fridays 9:30am to 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on 703-308-6604. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

ck  
ck

October 2, 2002

  
AMELIA M. AU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600